Department of the Army   **Ordnance Reg 350-18**
US Army Ordnance Center and Schools
Aberdeen Proving Ground, MD 21005-5201
Redstone Arsenal, AL 35897-6000
3 October 2008

Training
TEST DEVELOPMENT, ADMINISTRATION, AND CONTROL
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Summary. This regulation establishes policies, procedures, and responsibilities for the design, development, validation, administration, control, and analysis of tests and testing materials.

Applicability. This regulation applies to all personnel assigned and/or attached to the US Army Ordnance Center and Schools (USAOC&S). This regulation will also apply to both hard copy paper-based tests and the US Army Training and Doctrine Command's (TRADOC) Automated Instructional Management System (AIMS) generated tests.

Suggested Improvements. The proponents of this regulation are the Directorate of Instruction (DOI), US Army Ordnance Mechanical Maintenance School (USAOMMS) and the DOI, US Army Ordnance Munitions and Electronics Maintenance School (USAOMEMS). Send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) to Commander, US Army Ordnance Mechanical Maintenance School, ATSD-DI, Aberdeen Proving Ground, MD 21005-5201.

Availability. This regulation is available in electronic media only.
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This regulation supersedes OD Reg 350-18, dated 8 March 2006.
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Contents

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1. Purpose. This regulation establishes policies, procedures, and responsibilities for the design, development, validation, administration, control, and analysis of tests and testing materials.

2. Applicability. This regulation applies to all personnel assigned and/or attached to USAOC&S. This regulation will also apply to both hard copy paper-based tests and TRADOC's AIMS generated tests.

3. References. See Appendix A.

4. Responsibilities.

   a. Directors, DOI (USAOMMS and USAOMEMS) will--

      (1) Enforce local policies and procedures for test development, administration, and storage.

      (2) Conduct training for staff and faculty personnel in the development, administration, and control of tests, such as Systems Approach to Training (SAT) Test.

      (3) Ensure that only criterion-referenced tests (CRT) are used to measure student performance.

   b. Department Directors and Noncommissioned Officer Academy (NCOA) Commandants will--

      (1) Determine testing requirements and the type (performance or performance-based) of tests, either written or hands–on performance, that will accomplish the purpose of testing. Ensure tests measure student's competency and indicate that the student can accomplish the objectives. Ensure development of three equivalent versions of each test.

      (2) Ensure test developers are trained in the development, administration and control of tests and that the test plans developed are doctrinally and technically accurate.

      (3) Ensure the subject matter expert (SME) boards conduct an initial and subsequent annual review of all Ordnance-developed tests.

      (4) Appoint and relieve in writing a commissioned officer, warrant officer, noncommissioned officer in grade E6-E9, or a DA civilian in grade GS-5 or higher as the test control officer (TCO) and as an alternate TCO, for each area of responsibility.

      (5) Ensure a standard operating procedure (SOP) for test control within their area of responsibility is developed, as necessary. The SOP will include the exact administration procedures to follow during resident test administration and the proper level of test control needed. The SOP will include the implementation of risk management, environmental, and safety considerations as they apply to that specific department. Risk management should include the update of daily risk assessments prior to starting tests and the annotation and adjustment of risk assessments based on PMESII & PT = Political, Military, Economic, Social, Infrastructure, Information, Physical Environment, and Time and should address general requirements outlined within the lesson plans that are specific to that department; safety should address general requirements outlined in the test lesson plans and that are specific to that department. Review the SOP on an annual basis.

      (6) Ensure that a Student Evaluation Plan (SEP) and Test Plan exist for each training course. Approval of the SEP plan may be delegated to the annex or division chief.

      (7) Ensure an approved SEP for each training course is submitted to Academic Records, Resource/Information Management Office (OMMS) or Training Department Administration or Operations Office (OMEMS).

c. Test Control Officer (TCO) and Alternate TCO will—

(1) Develop or ensure that a Student Evaluation Plan (SEP) and Test Plan are in accordance with (IAW) TRADOC Reg 350-70, for each training course.

(2) Maintain a file of each SEP and test plan. Retain an electronic and hard copy of all questions in the data bank used to generate the tests.

(3) Ensure that tests are secure at all times. Develop test control procedures that include a method to determine, with reasonable assurance, the identity of the test taker (such as student number identification).

(4) Ensure that all tests are administered under the best possible testing conditions IAW test administration guide/instructions as outlined in NCOA and each training department's SOP.

(5) Ensure that tests and testing materials are validated IAW **Appendix B**. Maintain all validation documents for a minimum of two years after the test is obsolete IAW the Army Records Information Management System (ARIMS).

(6) Ensure that an item analysis of each test is conducted for all courses.

(7) Ensure that all versions of compromised tests are destroyed and a new test is developed for the next cycle.

(8) Establish appropriate computer security procedure(s) for use with computer testing.

(9) Be a graduate of a course that teaches the development, administration, and control of tests and testing materials.

(10) Exercise close supervision over all phases of the reception, storage, issue, and destruction of tests and test materials. Keep tests and sensitive materials in a controlled area where entry is limited to only authorized personnel.

(11) Ensure each page of tests and sensitive testing materials which must be controlled as stated IAW TRADOC Pam 350-70-5 are clearly labeled (except Type 1) **"FOUO-For Official Use Only-** Sensitive Examination (Testing) Materials – Sensitive in Nature" or similar words, to clearly indicate their nature. This includes paper copies and portable disks/diskettes.

(12) Designate in writing, personnel who are authorized to access and handle the materials. Attach the names of authorized persons to the container. Maintain a sign-in/sign-out log of the materials.

(13) Conduct a 100 percent inventory of all test booklets and other test materials upon receipt from developers and a follow-on inspection on a quarterly basis.

(14) Avoid the duplication of serial numbers and/or control numbers assigned to testing materials.

(15) Issue only the number of tests needed to test the students plus one for the test administrator. Rotate alternate versions of tests. Take precautionary measures to prevent test compromise.

(16) Establish procedures for the disposition of completed, lost, and compromised test materials.

(17) Document the destruction of test materials IAW **Appendix G** of this regulation.

(18) Ensure tests and answer sheets ARE NOT filed in student files or sent through normal distribution channels.

d. Test Administrators/Instructors will--

(1) Ensure each student has a fair and equal opportunity for successfully completing the test.

(2) Ensure that all tests are administered under the best possible testing conditions IAW test administration guide/instructions as outlined in NCOA and each training department's SOP.

(3) Coordinate all phases of the test to include: preparing the test site, obtaining the performance-based tests from the TCO and rotating alternate versions of tests, administering the test according to the test plan, rotating students through each station as appropriate, and scoring and conducting the test review.

(4) Ensure that the facilities, supplies, tools and equipment are available for the students prior to the testing period.

(5) Explain the test conditions, and procedures to the students for each test phase. Read the "directions to the student" clearly and verbatim.

(6) Remain in the classroom or testing area and monitor the administration of all tests or graded quizzes.

(7) Answer only administrative questions during the testing period. The administrator may rephrase questions for better understanding.

(8) Post the start and stop times on the whiteboard. When possible, verbally state the last five minutes of the remaining time.

(9) Grade performance-based (written) tests outside the classroom or where students cannot observe the grading process. Use the performance test score sheet designed for that specific test to score the test.

(10) Conduct an After Action Review (AAR) after all performance examinations and review any and all test items missed from the written examinations given.

(11) Ensure all test results are reported to the students as soon as possible.

(12) Inform students of their individual score.

5. Policies and Procedures.

a. Instructor/test developer requirements.

(1) Instructors must pass all performance-based (written) and hands-on performance tests for the block of instruction they teach IAW OD Reg 350-67, para 2-2b (Instructor Competencies), as follows:

(a) All instructors must pass the same tests the students take on the subjects they teach with a score of 90% or better.

(b) Instructors who fail to pass the test(s) with the required 90% will undergo remedial training and be retested.

(c) All examinations will be taken under the same proctored conditions as students.

(d) Those instructors who cannot score 90% will be assigned to other duties or training areas.

(2) Test developers must be a graduate of a course that teaches the development, administration, and control of tests and testing materials.

b. Test development.

(1) Each terminal learning objective (TLO) must be tested either directly or via its enabling learning objectives (ELO) or learning step except when the required step, knowledge, or skill is tested in another TLO.

(2) The total testing time for each block of instruction will not exceed 20 percent of the total program of instruction (POI) academic hours. All tests/quizzes in the POI must be identified in the SEP.

(3) There will be at least three equivalent versions of each performance-based (written) test since these can be used as both pre and post tests. However, for low-student input courses, the department director may approve the use of only two versions.

(4) Performance tests (hands-on) will have different versions only when each version meets the original test objective i.e., there could be equivalent versions of a troubleshooting test by inducing different faults that require the use of the same test, measurement, and diagnostic equipment (TMDE).

(5) Equivalent versions of multiple-choice must be at least 50 percent different, exception: DO NOT alter the number, type, and content or difficulty level of the questions.

(6) Write test items that, if answered correctly, will demonstrate the students' skill to perform the objective.

(7) Write questions in a format that requires the student to use actual manuals, training manuals, etc., in the process of reaching the solution, not necessarily as a tool to provide the direct answer. Use extracts only if they are part of the process of finding the correct answer and do not provide the correct answer verbatim.

(8) Provide a note in each test lesson plan stating, "During open-book tests, the time allotted for testing does not provide the opportunity for students to research all test items." Tell the students to answer all test items in which they know the answers and attempt to answer the remaining items through research.

(9) The test documents and lesson plans will contain information on safety, environment, risk assessment and the student honor code.

(10) Attach a cover sheet to all locally produced tests assembled in booklet format to maximize security and control to test and testing materials.

(11) Validate all tests/test instruments IAW the procedures outlined in **Appendix B**.

(12) Perform item analysis after each test. Analyze item difficulty, discrimination, and performance of distracters. This analysis is not part of the validation process.

c. Test administration.

(1) Open-book testing is the preferred method of testing. Technical manuals, training aids, etc., that are required on the job should be used to the maximum extent possible. Use closed-book tests only when it is important that the student memorizes the tested material.

(2) Students will use the actual manuals (printed or CD-ROM) for the hands-on performance test. The department director may permit the use of individual student notes that were taken during the class discussion.

(3) International students may use language dictionaries during testing. They are also allowed additional time (50 percent of POI time) to complete the test.

(4) Alternate equivalent versions of the test with successive classes to reduce test compromise. Give an equivalent version during a retest and to students who missed the previously scheduled test.

(5) If a student must leave the classroom before completing a test, the student will turn in the test. If there is not enough time to complete the test upon his/her return, reschedule the test using an alternate version.

(6) If the entire class must evacuate the site for emergency reasons, all test materials will remain in the classroom. The test will be terminated upon returning from the emergency. The student that was being evaluated when the emergency occurred will be designated as the last student in the group. He/She will not be penalized and will be given an opportunity to repeat the full test, using an alternate version, time permitting. The student, who was scheduled to be the next observed when the emergency occurred, will begin the test when the class returns from the emergency.

(7) Complete all performance and performance-based tests in one setting. Regularly scheduled breaks or lunch will not be taken during the testing period. Schedule the test to coincide with the lunch hour. A student completing the test before the time limit has expired should be put on break. No test will be conducted over a two-day period unless an emergency has occurred and there is not enough time left in the day to complete the test. In that case, an alternate version of the test will be given the next duty day.

d. Test scoring.

(1) Score all performance-based (written) tests as percentage correct.

(2) Score performance (hands-on) tests as a "GO," "NO-GO," or as a percentage correct for honor student criteria.

e. Test review.

(1) Ensure students clear their desktops of all materials (paper, pencils etc.) when conducting the test review. Writing or highlighting during the review is prohibited.

(2) Test time stated in the POI will include time for the review of the test. Conducting the review after each test is mandatory. A qualified instructor must be present for the review.

(3) Performance-based tests (written) are graded and reviewed as soon as all students have finished and the answer sheets collected.

(4) Discuss all of the test items missed in random order. Do not discuss the number or letter that reflects the correct response. Provide feedback on all test items or performance measures marked incorrect. Cite reference(s) for correct answers.

(5) Performance tests (hands-on) are graded and reviewed immediately upon completion by each student.

(6) Performance tests (group activity) are graded and reviewed only when all members of the group have finished or when time has expired. The review may be conducted on an individual or group basis.

(7) The passing scores for international students are determined in accordance with OD Reg 350-2.

(8) All students should be present for the review except international and US students excused for emergency reasons.

(9) Disputed test results are considered IAW procedures listed in Appendix D.
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Appendix A
References

AR 25-400-2
The Army Records Information Management System (ARIMS)

AR 340-21
The Army Privacy Program

AR 350-1
Army Training and Education

AR 380-5
Department of the Army Information Security Program

AR 611-5
Army Personnel Selection and Classification Testing *(TRADOC Reg 350-70 (Vl-7-3) states "proponents may use this reference as a guideline when developing local policy."*

AR 623-1
Academic Evaluation Reporting System

TRADOC Reg 350-6
Initial Entry Training (IET) Policies and Administration

TRADOC Reg 350-10
Institutional Leader Training and Education

TRADOC Reg 350-18
Total Army School System (TASS)

TRADOC Reg 350-70
Systems Approach to Training Management, Processes, and Products

TRADOC Pamphlet 350-70-5
Systems Approach to Training: Testing

OD Reg 350-2
Student Grade Reporting, Academic/Administrative Policies, and Procedures

OD Reg 350-66
Student Diagnostic Testing for Advanced Placement

OD Reg 350-67
Instructor Standards and Development Program

OCS Reg 600-50 (OMMS Only)
Student Honor Code and the Honor System

Appendix B
Validation Procedures

1. Validation refers to actions taken to ensure a test accomplishes its intended purpose. Validating and revising training are continuous actions in the process of training improvement.

2. Review Board.

    a. After the test has been developed, test proponents will assemble a technical review board. This board will consist of at least three SMEs, one of whom must be a graduate of a course that teaches the development, administration, and control of tests and testing materials. Board members will review the test instrument for the following:

        (1) Agreement of the test with the student evaluation plan (SEP).

        (2) Agreement of the test content, number and type of items with requirement of the test plan.

        (3) Technical and doctrinal accuracy.

        (4) Adherence to test item construction standards.

        (5) Clarity of the guidance to test administrators.

    b. The review board either approves the test or recommends that the test be revised and subjected to another review. If approved, the board will document the approval in a memorandum for record (MFR) prior to conducting validation trials.

3. Validation Trials.

    a. The test developer assembles the test, briefs the test administrators, and arranges for administration of the test to a class of target students.

    b. The test developer conducts a training session for administrators to ensure consistency of scoring and grading.

    c. A test developer monitors the test administration and collects first-hand information on the operational test to include students' comments and questions.

    d. The test developer assembles the subjects in the testing area and explains the procedures for testing prior to beginning the validation trials,

    e. Upon completion of the trials, the developer will collect all data (collect in random order) and evaluate performance of the test. The developer revises the test as appropriate and conducts another trial if necessary. This tryout and revision is repeated until the test validates.

    f. A test is considered valid when 80 percent of a class of 30 or more students passes on the first attempt.

    g. Classes with less than 30 students may be combined to obtain better results. The validation is noted on ATSL Form 933, Sequential Validation Chart, or an approved equivalent.

4. Minimum documentation requirements.

    a. Review board certification - A MFR signed by all board members stating the test instrument is ready for validation trials and is technically accurate.

b. Validation trial certification - A MFR signed by the test developer indicating validation has been completed per this appendix. Attach to the MFR a list of students by name, identification number and score.

c. Retain all documents used in the validation process after it becomes obsolete plus two years.

5. The validated test instrument and supporting validation documentation is forwarded to the Department Director or for NCOA courses to the NCO Commandant for final approval.

6. Validation should occur every time the TLO/Enabling Learning Objective (ELO) changes or on a periodic basis dependent on class size and frequency of the class.

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Appendix C
Student Evaluation Plan (SEP)

1. Purpose. Establish student responsibilities and pass/fail criteria.

2. Format. Write the SEP in memorandum format style. See TRADOC PAM 350-70-5 for additional guidance.

3. Preparation. The SEP will contain, as a minimum, the following:

    a. Learner's performance measurement instruments and procedures administered to the learner.

    b. The learning objective to be tested at each administration.

    c. Counseling and remedial training policy.

    d. Retest policy.

    e. Relief/Recycle policy (for Initial Entry Training (IET) Courses, a flowchart depicting the relief/recycle process which enables the learners to visualize and follow the procedures is recommended).

    f. Training graduation (pass/fail) criteria.

    g. GO/NO GO requirements for each test.

    h. Minimum course attendance requirements.

    i. Definition of sustained poor performance.

    j. Grade adjustment procedures.

    k. Honor/distinguished graduate determination procedures.

    l. Affiliation American Council on Education college credit.

    m. A listing of other nonacademic learner assessment requirements for course completion, such as APFT score, leadership assessments, peer ratings, etc.

Note: Ensure the SEP reflects TRADOC policy in each area above. Discretion is allowed only when not directly addressed by policy.

4. Test reclama/feedback policy will be IAW TRADOC Pam 350-70-5, para 5.5, and includes the following:

    a. Procedures for submitting (when, how, time limits).

    b. Decision making processes and documentation.

    c. Actions upon acceptance/rejection.

5. Authentication. Obtain the signature of the approving authority.
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Appendix D
Student Evaluation Plan (SEP) Example

ATSL-CSD-WOPDD   05 January 2009

MEMORANDUM FOR RECORD

SUBJECT: Student Evaluation Plan for the <u>Senior Automotive Maintenance Officer Advanced Course, 4-9-C32-915E, PH 0</u>, effective <u>5 Jan 09</u> with Class <u>No. 003-09</u> and follow-on classes.

1. <u>ACADEMIC GRADING AND TEST PLAN:</u> Academic subject matter is evaluated on a basis of 1,000 weight points, which are distributed according to this document. Weight point achievement is calculated to a percentage computed to the second decimal place (0.00%) and used to determine student's completion of training. All examinations in this course are <u>CRITICAL EXAMINATIONS.</u>

   a. MODULE B, OPERATIONAL MANAGEMENT

PFN	TITLE	EVENT #	WEIGHT
91X32B13	OPERATIONAL MGMT CBT	1	100

- This is Operational Management (91X32B13) Computer Based Written Test (CBWT) on eOrdanceU Blackboard. This CBWT contains multiple-choice/true and false questions that pertain to Operational Management. The test is designed to check your knowledge and application of Operational Maintenance. With the required materials, the student must demonstrate knowledge gained for each terminal learning objective as follows:

PFN 91X32B02 (Army Transformation) answer a minimum of 4 out of 5 questions correctly.
PFN 91X32B06 (Forward Operating Base) Operations answer a minimum of 3 out of 4 questions correctly.
PFN 91X32B07 (Convoy Operations/Survivability) answer a minimum of 3 out of 4 questions correctly.
PFN 91X32B08 (ABCS) answer a minimum of 4 out of 5 questions correctly.
PFN 91X32B09 (FBCB2) answer a minimum of 3 out of 4 questions correctly.
PFN 91X32B11 (Pre-Deployment and Re-Deployment Activities) answer a minimum of 2 out of 3 questions correctly.

- The allotted examination POI time is 2.0 hours to include 1 hour 30 minutes for the test, 10 minutes in preparation for the test and 20 minutes for a test review.

   b. MODULE C, STAMIS

PFN	TITLE	EVENT #	WEIGHT
91X32C15	STAMIS CBT	2	100

- You are about to take Operational Management (91X32C15) Computer Based Written Test (CBWT) on eOrdanceU Blackboard. This CBWT contains multiple-choice/true and false questions that pertain to Operational Management. The test is designed to check your knowledge and application of Operational Maintenance. With the required materials, the student must demonstrate knowledge gained for each terminal learning objective as follows:

PFN 91X32C06 (SARRS) answer a minimum 5 out of 7 questions correctly.
PFN 91X32C12 (SAMS1-E) answer a minimum 14 out of 18 questions correctly.

- The allotted examination POI time is 2.0 hours to include 1 hour 30 minutes for the test, 10 minutes in preparation for the test and 20 minutes for a test review.

c. MODULE D, MAINTENANCE and MATERIAL MANAGEMENT

PFN	TITLE	EVENT #	WEIGHT
91X32D05	MAINTENANCE/MATERIAL MGMT CBT	3	100

- You are about to take Operational Management (91X32D05) Computer Based Written Test (CBWT) on Blackboard. This CBWT contains multiple-choice/true and false questions that pertain to Operational Management. The test is designed to check your knowledge and application of Operational Maintenance. With the required materials, the student must demonstrate knowledge gained for each terminal learning objective as follows:

PFN 91X32D01 (OSMIS) answer a minimum 2 out of 3 questions correctly
PFN 91X32D02 (Field Level Support Maintenance Operations) answer a minimum 3 out of 5 questions correctly
PFN 91X32D03 (Distribution Management Centers) answer a minimum 3 out of 5 questions correctly
PFN 91X32D04 (Contractors Accompanying the Force) answer a minimum 5 out of 7 questions correctly.

- The allotted examination POI time is 2.0 hours to include 1 hour 30 minutes for the test, 10 minutes in preparation for the test and 20 minutes for a test review.

d. MODULE G, 609 CERTIFICATION

PFN	TITLE	EVENT #	WEIGHT
91532G05	609 CERTIFICATION PBWT	4	50

- This is a performance-based (written) test on your knowledge gained in the lessons pertaining to refrigerants and refrigerants usage. With references and without assistance, the student must demonstrate knowledge gained in lesson PFN 91532G04.

PFN 91532G04 (refrigerants and refrigerants usage) answer a minimum of 18 of 25 questions correctly to receive certification.

- The allotted examination POI time is 1.5 hours, which includes .5 hours for review of the test.

e. MODULE H, RECOVERY

PFN	TITLE	EVENT #	WEIGHT
91532H04	RECOVERY PBWT	5	50

- This is a performance-based (written) test on your knowledge gained in the lessons pertaining to Recovery Systems and Procedures. The test is designed to check your knowledge and application of Recovery Systems and Procedures. With references, without assistance and with the required materials, the student must demonstrate knowledge gained for each terminal learning objective as follows:

PFN 91532H01 (Technical Inspection and Classification of Equipment) correctly answer 4 out of 5 questions

PFN 91532H02 (Manage Recovery Operations) correctly answer 2 out of 3 questions

PFN 91532H03 (BDAR) correctly answer 1 out of 2 questions

- The allotted examination POI time is 1.5 hours, which includes 1 hour for the test, 10 minutes in preparation for the test and 20 minutes for a test review.

f. MODULE K, SMALL ARMS AND CREW SERVED WEAPONS

PFN	TITLE	EVENT #	WEIGHT
91532K04	SMALL/CREW WEAPONS PBWT	6	50

- This open-book performance-based (written) test contains multiple-choice questions designed to check your knowledge gained in the lessons pertaining to Small Arms Maintenance. With the required materials, but without assistance, the student must demonstrate knowledge gained for each terminal learning objective as follows:

PFN 91532K01 (Maintain Selected Small Arms) answer a minimum of 12 out of 16 questions correctly.

PFN 91532K02 (M242 Chain Gun Maintenance) answer a minimum of 5 out of 9 questions correctly.

- The allotted examination POI time is 1.5 hours to include 1.0 hour for the test, 12 minutes for preparation for the test and 18 minutes for a test review.

g. MODULE K, SMALL ARMS AND CREW SERVED WEAPONS

PFN	TITLE	EVENT #	WEIGHT
91532K05	SMALL/CREW WEAPONS HOPT	7	25

- This is a hands-on performance test (HOPT) on your knowledge gained in the lessons pertaining to Small Arms Maintenance.   You are required to disassemble, inspect, identify critical components, reassemble, and function check a selected weapon while observing all safety considerations. With the required equipment and references, but without assistance, the student must demonstrate skills gained during lessons PFNs 91532K01 and 91532K02.

- The allotted examination POI time is 10 hours, which includes 8.5 hours for the test, 1.0 hour for a demonstration, 12 minutes for preparation for the test and 18 minutes for test review.

h. MODULE L, WHEELED VEHICLE SYSTEMS

PFN	TITLE	EVENT #	WEIGHT
91532L04	WHEELED VEHICLE SYSTEMS CBT	8	100

- This is a computer based test (CBT) on your knowledge gained in the lessons pertaining to Wheeled Vehicle Systems. The test is designed to check your knowledge and application of Wheeled Vehicle Systems. With references, without assistance and with the required

materials, the student must demonstrate knowledge gained for each terminal learning objective as follows:

PFN 91532L01 (Manage the operation of Test Measurement and Diagnostic Equipment Usage) correctly answer a minimum 3 out of 4 questions
PFN 91532L02 (Manage the Maintenance of Wheeled vehicle Electrical Systems) correctly answer a minimum 4 out of 5 questions
PFN 91532L03 (Manage the maintenance on wheeled vehicle power train, hydraulic and pneumatic systems) correctly answer a minimum 4 out of 6 questions

- The allotted examination POI time is 1.5 hours, which includes .2 hours for review of the test.

i. MODULE N, ALLIED TRADES OPERATIONS

PFN	TITLE	EVENT #	WEIGHT
91532N15	ALLIED TRADES PBWT	9	25

- This open-book performance-based (written) test contains multiple-choice questions designed to check your knowledge gained in the lessons pertaining to Allied Trade Operations. With the required materials, but without assistance, the student must demonstrate knowledge gained for each terminal learning objective as follows:

PFN 91510N13 (Set Up the Trailer Mounted Welding Shop Set) answer a minimum of 7 out of 9 questions correctly.
PFN 91510N14 (Install Plugs, Studs, Screws, and Inserts) answer a minimum of 8 out of 11 questions correctly.

- The allotted examination POI time is 1.5 hours, which includes 1.0 hour for the test, 12 minutes for preparation of the test, and 18 minutes for test review.

j MODULE U, CBT VEH (MED) SYSTEMS MAINTENANCE

PFN	TITLE	EVENT #	WEIGHT
91532U07	CBT VEH (MED) SYSTEMS MAINTENANCE	10	100

- This performance based written test contains multiple-choice questions that pertain to the Bradley Fighting Vehicles Maintenance. With the required materials, the student must demonstrate knowledge for each terminal learning objective as follows;

PFN 91532U01 (BFV Familiarization and Safety) correctly answer 1 out of 1 questions.
PFN 91532U02 (BFV Test, Measurement and Diagnostics Equipment) correctly answer 1 out of 1 questions.
PFN 91532U03 (BFV Automotive Electrical Systems) correctly answer 5 out of 7 questions.
PFN 91532U06 (BFV Power Unit Maintenance) correctly answer 11 out of 16 questions.

- The allotted examination POI time is 1.5 hours to include 1 hour for the test, 10 minutes in preparation for the test and 20 minutes for a test review.

PFN	TITLE	EVENT #	WEIGHT
91532U15	CBT VEH (MED) SYSTEMS MAINTENANCE	11	100

- This open-book performance-based (written) test contains multiple-choice questions designed to check your knowledge gained in the lessons pertaining to BFV Turret Systems. With the required materials, but without assistance, the student must demonstrate knowledge gained for each terminal learning objective as follows:

PFN 91532U09   (BFV Turret System Functioning) answer a minimum of 2 out of 3 questions correctly.
PFN 91532U10 (State electrical systems functioning of the BFV turret) answer a minimum of 2 out of 3 questions correctly.
PFN 91532U11   (Troubleshoot the BFV turret power system) answer a minimum of 2 out of 3 questions correctly.
PFN 91532U12   (Troubleshoot the BFV Turret Drive System) answer a minimum of 2 out of 3 questions correctly.
PFN 91532U13   (Troubleshoot the BFV TOW Lift Elevation) answer a minimum of 3 out of 4 questions correctly.
PFN 91532U14   (Troubleshoot the BFV Stabilization) answer a minimum of 3 out of 4 questions correctly.

- The allotted examination POI time is 1.5 hours, which includes 1.0 hour for the test, 12 minutes for preparation of the test, and 18 minutes for test review.

k. MODULE V, CBT VEH (HVY) SYSTEMS MAINTENANCE

PFN	TITLE	EVENT #	WEIGHT
91532V09	CBT VEH (HVY) SYSTEMS MAINTENANCE	12	100

- This performance based written test contains multiple-choice questions that pertain to the M1 series Tank Vehicles Maintenance. With the required materials, the student must demonstrate knowledge for each terminal learning objective as follows;

PFN 91532V01 (M1 Tank Familiarization and Safety) correctly answer 1 out of 1 questions.
PFN 91532V02 (M1 Tank TMDE Equipment) correctly answer 1 out of 1 questions.
PFN 91532V03 (AGT 1500 Engine Logic) correctly answer 4 out of 5 questions.
PFN 91532V04 (M1 Series Tank automotive Electrical System) correctly answer 5 out of 7 questions.
PFN 91532V07 (M1 Series Tank Power Pack Maintenance) correctly answer 7 out of 10 questions.
PFN 91532V08 (M1 Tank NBC System) correctly answer 1 out of 1 questions.

- The allotted examination POI time is 1.5 hours to include 1 hour for the test, 10 minutes in preparation for the test and 20 minutes for a test review.

PFN	TITLE	EVENT #	WEIGHT
91532V14	CBT VEH (HVY) SYSTEMS MAINTENANCE	13	100

- This open-book performance-based (written) test contains multiple-choice questions designed to check your knowledge gained in the lessons pertaining to M1 Tank Turret Systems. With the required materials, but without assistance, the student must demonstrate knowledge gained for each terminal learning objective as follows:

PFN91532V10 (Operating procedures of the M1 Tank Turret) answer a minimum of 4 out of 6 questions correctly.

PFN91532V11 (Functions of the electrical and hydraulic systems of the M1 tank turret) answer a minimum of 4 out of 6 questions correctly.

PFN91532V12 (Troubleshoot the M1A1 turret system) answer a minimum of 5 out of 6 questions correctly.

PFN91532V13 (Identify components and function of the M1A1 turret fire control system) answer a minimum of 5 out of 7 questions correctly.

- The allotted examination POI time is 2.0 hours, which includes 1.5 hour for the test, 12 minutes for preparation of the test, and 18 minutes for test review.

TOTAL COURSE ACADEMIC POINTS   **1000**

2. COUNSELING:

a. Students will participate in a minimum of three counseling's during the course to review academic progress and discuss personal development. Additionally, students will be counseled if they fail to comply with the Standards of Academic Integrity and Conduct.

b. Students will receive written counseling for any test failures or their course grade point average GPA falls below 75%.

c. Counseling for International students will be in accordance with OCS Reg 351-2, chapter 5.

d. All academic counseling will be documented on DA Form 4856.

e. PROHIBITED PRACTICES/STUDENT HONOR CODE VIOLATIONS: Students may be processed for dismissal and service elimination when found in violation of prohibited practices as outlined in OCS Reg 600-2 and/or student honor code violations as outlined in OCS Reg 600-50.

3. MINIMUM ACHIEVEMENTS:

a. All officers and civilian students must maintain a cumulative grade point average of at least 70 percent or higher, 65 percent for International students. In addition, the following policies are in effect:

b. All students must complete each examination to the established standard set for each terminal learning objective (TLO) as documented above.

c. Once a student has failed an examination on their first attempt, they will be remediated and retested only on failed TLO within 5 academic days.

d. Students will be allowed up to three attempts on all examinations (written and hands-on); (GO1 = passing the examination on the first attempt; GO/2 = passing the examination on the second attempt or GO3 on third attempt.

e. All second attempts PBWT passing scores will be 70% regardless of the actual percentage scored for class standing status.

4. GRADE ADJUSTMENT PROCEDURES:

a.   Grievances that are purely academic in nature must first be discussed with the SGL /Instructor and then the Department Director whose decision is final.

b.   If the student's grievance is approved test control will be notified and the appropriate grade will be adjusted. If the student grievance is disapproved no other further action is required.

c.   All grievances must be filed within 24 hours from the time the student is notified of their grade. When filing a grievance, students must have supporting documentation to support grievance, i.e.: student handout, Army Regulation, Technical Manual, or something of that nature. A student's hand written notes is not acceptable.

d.   In cases where discrimination or violation of policy may be involved; the student should use the chain of command up to the Commandant to seek resolution of any and all issues.

e.   A student may seek the assistance of the Equal Opportunity Advisor (EOA) or the Inspector General (IG) at anytime. The student will inform the chain of command if he/she desires to see the EOA or IG during duty time but does not have to discuss the reason.

5. HONORS/DISTINGUISHED GRADUATE DETERMINATION PROCEDURES IAW OD Reg 672-202: Decorations, Awards and Honors, Diplomas, Certificates, and Student Awards Program.

a. **Distinguished Graduate Certificate,** awarded to the top graduate of a TRADOC approved course/class with a cumulative academic average of 95% or higher. This average is based on a student achieving a 95% or higher on all terminal learning objectives on the first attempt. The student must not have received any disciplinary action. The training department will nominate the student to receive this award based on the "total person" concept after also considering input from the student's company commander.

b. **Honor Graduate Certificate,** Awarded to the graduate(s) with a cumulative academic average of 90% or higher and within the top 10% of a TRADOC approved course/class. This average is based on a student achieving a 90% or higher on all terminal learning objectives on the first attempt. Student(s) must not have received any disciplinary action. The training department will make nominations based on the "total person" concept for this award after considering input from the student's company commander.

c. **Distinguished International Graduate,** the top international graduate in a professional development course with a minimum average of 85 percent and who meets the criteria as outlined in OD Reg 672-202, Appendix K.

6. AFFILIATION AMERICAN COUNCIL ON EDUCATION/COLLEGE CREDIT;

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 2 semester hours in logistic supervision. In the upper-division baccalaureate category, 1 semester hour in leadership and 3 in maintenance management.

7. OTHER EVALUATIONS:

a. PHYSICAL TRAINING: Courses longer than 30 days require students to take the standard 3 event Army Physical Fitness Test (APFT) to successfully complete the course. The APFT will be given within the first 72 hours of enrollment. If any student fails the initial APFT, the student will be provided a retest 7 to 14 days after the initial failure. Failure to pass the APFT will be noted on Academic Evaluation Report (AER).

b. EVALUATION OF STUDENT PERFORMANCE: The SGL will evaluate the student using the Warrant Officer Evaluation Report (ASTL 316), the General Counseling Form (DA Form 4856), and the Service School Academic Evaluation Report (DA Form 1059-AER) in the following areas:

Warrior Ethos

       Written Communication (Write an advance battle analysis)

       Oral Communication (Present a block of instruction, plan staff ride)

       Leadership Skills (Display of Army Values)

       Contribution of Group Work (Participation in classroom discussions, peer interaction)

       Students Research Ability (Successful completion of homework assignments and the preparation of individual student taught classes and or assigned subjects).

8. CHALLENGING TRAINING: Student may take any test prior to receiving the training with the following exceptions:

Student may take any or all tests prior to receiving the training with the following exceptions:

    (1) Do NOT permit a student with an academic average of 75% or below to challenge a block of instruction.

    (2) If a student challenges all tests, and fails one test, then the Soldier will start at the beginning of the course and receive a first NO-GO.

Not sure what your challenges are, this is off one of ours.

                 GARY F. NEUSER
                    Director, Command and Staff Department

**44B10F13 PERFORMANCE
BASED WRITTEN TEST**

TOTAL HOURS TRAINED			20.3			
TOTAL NUMBER OF TEST QUESTION			15			
Lesson/TLO Number	ELO number (optional)	Learning step/ activity	Learning step/activity	Quantity of Questions Needed For Coverage of ELO per Version	TOTAL Quantity of Questions for step	Total Quantity of Items For Three Versions
44B10F09	Sharpen Twist Drills	**INTRO**	0.1	0	0	
		ELO A	0.5	0	1	
		ELO B	1	1	2	
		ELO C	4.6	3	10	
		SUM	0.1	0	0	
			6.3	**5**	**14**	**14**
44B10F10	Thread Operations	**INTRO**	0.1	0	0	
		ELO A	0.6	0	1	
		ELO B	0.2	0	0	
		ELO C	1	1	2	
		SUM	0.1	0	0	
			2	**1**	**4**	**4**
44B10F11	Drilling and Tapping	**INTRO**	0.1	0	0	
		ELO A	0.5	0	1	
		ELO B	0.2	0	0	
		ELO C	0.3	0	1	
		ELO D	2.8	2	6	
		SUM	0.1	0	0	
			4	**3**	**9**	**9**
44B10F12	Installation / Removal of Plugs, Studs, Screws, and Inserts	**INTRO**	0.1	0	0	
		ELO A	0.5	0	1	
		ELO B	0.3	0	1	
		ELO C	0.5	0	1	
		ELO D	6.5	5	14	
		SUM	0.1	0	0	
			8	**6**	**18**	**18**

| | | TOTAL | 20.3 | 15 | 45 | 45 | |

Appendix F
Retesting Procedures and Reclama Actions

1. DO NOT retest students before providing remedial training IAW the SEP and OD Reg 350-2.

2. Students qualified for a retest are those who have failed a previous test.

3. Retest students in officer and noncommissioned officer courses within five academic days after failure notification.

4. Retest advanced individual trainees AIT and IET as soon as possible after retraining is completed.

5. Administer a different version of the test, if applicable.

6. The final (max) score awarded on a retest will not exceed 70 percent if the student is successful.

7. The course manager may modify testing procedures for specific requirements.

8. Process an academic reclama as follows:

    a. The student(s) must inform the instructor immediately of his or her intent to challenge the test/test results.

    b. The student will submit a written intent statement reclama outlining the reasons for the challenge.

    c. Upon the receipt of the written statement and question, the instructor will forward the request to the chief instructor.

    d. The chief instructor will investigate the situation and render a final decision and no other action is required.

    e. Students who have initiated an academic reclama for reconsideration of their final grade/score will be present for the test review.

_____

Appendix G
Test Material Destruction Document

DEPARTMENT OF THE ARMY
(Department name)
US Army Ordnance Center and Schools
Aberdeen Proving Ground, Maryland 21005-5201

ATSD-*(enter your dept. i.e. WMSD)*   *(today's date)*

MEMORANDUM FOR RECORD

SUBJECT: Destruction Certificate

1. All test material will be destroyed IAW AR 611-5, pg 2-2, Para 2-2b (7), dated 10 June 02.

2. The following test material has been destroyed for class _____, course _____, by the undersigned Test Control Officer.

Lesson No#/Version	Test Serial No#	Test Materials Destroyed
		Test Booklets and Solution Sheet
		Test Booklets and Solution Sheet

3. POC for this action is the undersigned at *(enter TCOs phone number).*

                              (enter TCOs name)
                              (enter TCOs rank),
                              Test Control Officer

_____

Glossary

Section I
Abbreviations

AAR
After Action Review

AIMS
Automated Instructional Management System

AIT
Advanced Individual Training

APFT
Army Physical Fitness Test

ARIMS
The Army Records Information Management System

DOI
Directorate of Instruction

ELO
Enabling Learning Objective

FOUO
For Official Use Only

IAW
In Accordance With

IET
Initial Entry Training

MFR
Memorandum for Record

NCOA
Noncommissioned Officer Academy

POI
Program of Instruction

PMESII & PT
Political, Military, Economic, Social, Infrastructure, Information, Physical Environment, and Time

SAT
Systems Approach to Training

SEP
Student Evaluation Plan

SOP
Standing Operating Procedure

TCO
Test Control Officer

TLO
Terminal Learning Objective

TM
Technical Manual

TMDE
Test, Measurement, and Diagnostic Equipment

TRADOC
US Army Training and Doctrine Command

USAOC&S
US Army Ordnance Center and Schools

USAOMEMS
US Army Ordnance Munitions and Electronics Maintenance School

USAOMMS
US Army Ordnance Mechanical Maintenance School

_____

Section II
Terms

Academic Hour
An academic hour is equal to 50 minutes. For testing purposes, an academic hour is equal to 60 minutes.

Combat or Mission Critical
Block of instruction or task in a professional development course that each student must pass in order to graduate. The SEP lists all critical blocks of instruction.

Criterion-Referenced Test (CRT)
A CRT measures an individual' skill or knowledge, compared to what the individual must perform or must know, in order to successfully perform a task.   .

Equivalent (Alternate) Test
One of two or more versions of a test constructed to the same specifications, containing the same type and number of items, which are alike in content, level of difficulty, and other significant characteristics.

GO/NO GO - Pass or Fail
Performance is measured as "GO" or "NO-GO" against a prescribed criterion – the learning objective standard. The student must accomplish each task and critical step to standard and in proper sequence (if appropriate), to receive a GO.

Item
Individual problems or questions listed on a test.

Item Analysis
The process of determining whether a test item functions as indicated. Alternatively, the use of results on individual test item to determining effectiveness of the item.

Performance (Hands-on) Test
Require students to prove competency by using the actual equipment, materials, or training aids to perform the required training objective.

Performance-Based (Written) Test
Used to assess the student's ability to apply facts, principles, procedures, etc., required to perform the learning objective

Quiz
A test (written or oral), which checks an individual's retention of information from either preparatory study or classroom presentation. A quiz contains a limited number of test items.

Reclama
Is a method available to students to challenge their scored value on a previously given examination or test. This action must be initiated immediately after a test and before the grades are posted to their record.

Retest
Test again; a repeated test using an equivalent version of the test.

Review Board
A board of subject matter experts established to evaluate a test or a revised test for validity, reliability, difficulty, and discrimination.

Student Evaluation Plan (SEP)
Plan that details how the proponent school will demonstrate if the student has a sufficient level of competency to pass the course or training.

Subject Matter Expert (SME)
The term SME refers to any person who is an expert in the subject matter area. Normally, a SME will instruct in his/her area of expertise.

Test
A device, technique, or measuring tool used to determine if a student or group can accomplish the objective to the established standard.

Test Administrator
An instructor who has responsibility to administer tests?

Test Control
Application of security measures to protect test and test items and related sensitive materials from unauthorized disclosure from the time of their creation until they become obsolete or are destroyed.

Test Control Officer (TCO)
The individual appointed in writing who exercises close supervision over all phases of the reception, storage, issue, and destruction of test materials.

Test Plan
A document prepared by test developers listing the number of items on a test, and the objectives tested.

Test Proponent
A section or office within the training departments that has primary responsibility to write, develop, and revise test items and testing materials.

Test Review
A test review is a learning event/activity that occurs after the grading of tests, which helps the learner identify the items that were missed, and provides short immediate remediation on the correct answer.

Testing Out
The process and procedure for enabling a student to take a course test to determine if the training must be taken. A student passing a pretest to test-out of training will receive full credit for the training. This is a "pretest."

Validation
The process used to determine if new/revised course and training products/materials accomplish their intended purpose efficiently and effectively. It is the process used to determine if training accomplishes its intended purpose and identifies any training product deficiencies.
_____

(ATSD-DI)

LYNN A. COLLYAR
Brigadier General, USA
Commanding

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Electronic